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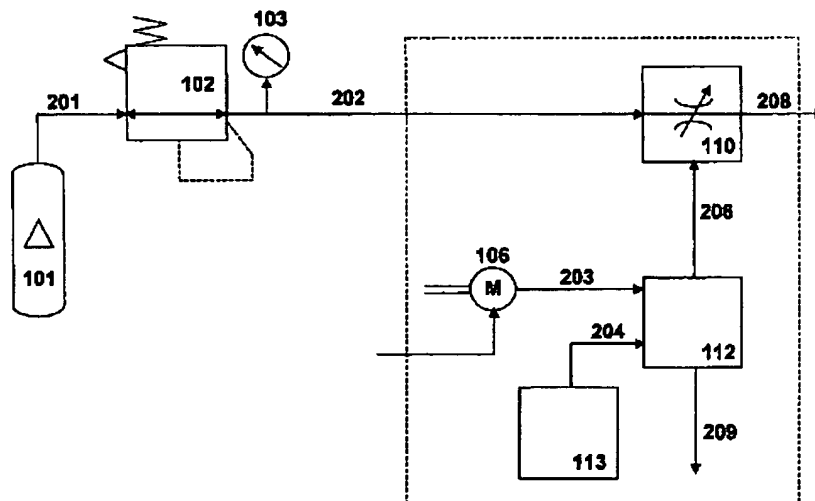
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(57) Abstract: The inventive system and method allows the control of shielding gas in an electric welding apparatus having automatic wire feed by controlling the flow rate of the shielding gas as a function of the wire feeding speed and/or the welding current obtained. A control circuit (112) receives an input signal (203) that is representative for the wire feeding speed and/or the welding current, and issues, in response to the input signal (203), a control signal (206) to a controllable flow control valve (110) in a gas supply line (201, 202, 208), which passes shielding gas from a tank (101), via a regulator valve (102), to a discharge nozzle of the welding apparatus welding gun. An adjusting unit (113) provides an operator with an interface which permits adjustments of the parameters that determine the flow rate function.

WO 03/082509 A1